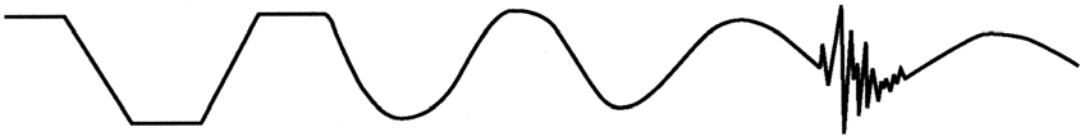
Basin and Range Province



Seismic Hazards Summit II

Evaluating Approaches, Techniques, and Policies for
Seismic Hazard Characterization in Extensional Regions

A conference to be held at the John Ascuaga's Nugget Resort

Reno, Nevada
May 16, 17, 18, and 19, 2004

Sponsored by

Western States Seismic Policy Council
United States Geological Survey
Federal Emergency Management Agency

And Geoscientists from:

Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Wyoming

- CALL FOR PAPERS -

Schedule

Titles: February 5, 2004
Expanded Abstracts: March 10, 2004
Early Registration ends: March 15, 2004
Proceedings Papers: June 30, 2004

Further details will be posted at www.nbmg.unr.edu
Titles, abstracts, and papers can be sent to: Terri Garside,
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Reno, Nevada, 89557 or tgarside@unr.edu

The Basin and Range Province of North America is a land of contrasts and challenges for seismic hazard analysis and application. Seismogenic faults within the province are generally intraplate in character, with earthquake recurrence intervals on the order of thousands to hundreds of thousands of years. This may make the hazard sound remote, but there are literally thousands of Quaternary faults, many of which are not detected yet, and many others that are too poorly understood to include in general seismic hazard analyses.

There are many relevant questions for which a significant amount of research has occurred relatively recently. For example, fault lengths are commonly used to scale earthquake size. Several recent studies have examined the use of single-event displacements in scaling earthquake size, which may be important in characterizing large multi-segment earthquakes, a common occurrence in the province. Should more emphasis be given on these types of analyses in seismic hazard analysis than currently is? What are the techniques currently used to analyze seismic hazards? Are these techniques still the best approach possible, or are there new techniques that would be better to use and why?

This meeting is bringing together ten state surveys, the U.S. Geological Survey, university professors, and some of the best minds in contemporary science and engineering geology to discuss seismic hazard analysis in the Basin and Range Province. Quaternary fault and seismicity maps from each of the ten participating states will be available to use as a backdrop for neotectonic, seismic hazard, and policy discussions.

The format of the summit will be a sequence of summary talks given on specific topics relevant to seismic hazards in the Basin and Range Province. Follow-up will include panel discussions and interactive audience participation. A policy discussion covering the day's topics will follow, and any policies that gain a majority vote will be forwarded to the Western States Seismic Policy Council to consider. Additional specific seismic hazard analyses or topics will be presented in a conference-long poster session. We encourage wide participation by all interested scientists, engineers, emergency managers, and policy makers to help gain as many ideas and viewpoints as possible. The conference will include a program with abstracts, and a post-summit proceedings volume to capture the presentations and findings of the summit. Emphasis will be given to seismic hazards in the Basin and Range Province, problems encountered, solutions employed, and policies that should be adopted.

Some Topics Relevant to the Seismic Hazard Summit:

- Earthquake size and recurrence estimation techniques
- Fault slip rate determination
- Fault earthquake segmentation and model weighting
- Accounting for "unstudied" Quaternary faults and uncertainty
- Ground motion attenuation in extensional areas
- Basin effects on ground motion
- Use of geodesy in seismic hazard models
- Neotectonics of the Basin and Range Province
- Policy implications, including priorities for scientific investigations
- All topics related to seismic hazard analysis in extensional areas are encouraged